

# CLAIMS

1. A digital signal processing apparatus comprising:

input means for inputting an encoded digital signal;

decoding means constructed by software for decoding said digital signal inputted by said input means;

first storing means for storing the digital signal decoded by said decoding means by an amount corresponding to a plurality of access units; and

managing means for managing an outputting order of said digital signal of the access units stored in said first storing means by an FIFO format.

2. A digital signal processing apparatus according to claim 1, wherein said decoding means decodes said digital signal by an MPEG system.

3. A digital signal processing method comprising:

an input step of inputting an encoded digital signal;

a decoding step of decoding said digital signal inputted by a process in said input step by software;

a first storing step of storing the digital signal decoded by a process in said decoding step by an amount corresponding to a plurality of access units;

and

a managing step of managing an outputting  
order of said digital signal of the access units stored  
by a process in said first storing step by an FIFO  
format.

4. A providing medium for providing a computer-  
readable program for allowing a digital signal  
processing apparatus to execute processes, wherein said  
processes comprise:

an input step of inputting an encoded digital  
signal;

a decoding step of decoding said digital  
signal inputted by a process in said input step by  
software;

a first storing step of storing the digital  
signal decoded by a process in said decoding step by an  
amount corresponding to a plurality of access units;  
and

a managing step of managing an outputting  
order of said digital signal of the access units stored  
by a process in said first storing step by an FIFO  
format.

5. A digital signal processing apparatus  
comprising:

input means for inputting video data;  
first storing means for storing said video  
data inputted by said input means;

predicting means for predicting a data amount  
at the time when said video data stored in said first  
storing means is encoded;

encoding means for encoding said video data  
stored by said first storing means; and

second storing means for storing the video  
data encoded by said encoding means,

wherein the encoding by said encoding means  
is executed if it is determined that the data of said  
amount predicted by said predicting means can be stored  
in said second storing means, and the encoding is  
interrupted while said video data is being inputted by  
said input means and is being processed.

6. A digital signal processing method  
comprising:

an input step of inputting video data;

a first storing step of storing said video  
data inputted by said input step;

a predicting step of predicting a data amount  
at the time when said video data stored in said first  
storing step is encoded;

an encoding step of encoding said video data  
stored by said first storing step; and

a second storing step of storing the video  
data encoded by said encoding step,

wherein the encoding in said encoding step is  
executed if it is determined that the data of said

amount predicted by said predicting step can be stored by a process in said second storing step, and the encoding is interrupted while said video data is being inputted by said input step and being processed.

5        7.        A medium for allowing a computer to execute a program, wherein said program comprises:

          an input step of inputting video data;

          a first storing step of storing said video data inputted by said input step;

10           a predicting step of predicting a data amount at the time when said video data stored in said first storing step is encoded;

          an encoding step of encoding said video data stored by said first storing step; and

15           a second storing step of storing the video data encoded by said encoding step, and

          the encoding in said encoding step is executed if it is determined that the data of said amount predicted by said predicting step can be stored by a process in said second storing step, and the encoding is interrupted while said video data is being inputted by said input step and being processed.

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